

SLC39A9 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50829

Product Information

Application	WB
Primary Accession	<u>Q9NUM3</u>
Reactivity	Human, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	32251

Additional Information

Gene ID	55334
Other Names	Zinc transporter ZIP9, Solute carrier family 39 member 9, Zrt- and Irt-like protein 9, ZIP-9, SLC39A9, ZIP9
Dilution	WB~~ 1:1000
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20°C

Protein Information

Name	SLC39A9 (<u>HGNC:20182</u>)
Synonyms	ZIP9
Function	Transports zinc ions across cell and organelle membranes into the cytoplasm and regulates intracellular zinc homeostasis (PubMed: <u>19420709</u> , PubMed: <u>25014355</u> , PubMed: <u>28219737</u>). Participates in the zinc ions efflux out of the secretory compartments (PubMed: <u>19420709</u>). Regulates intracellular zinc level, resulting in the enhancement of AKT1 and MAPK3/MAPK1 (Erk1/2) phosphorylation in response to the BCR activation (PubMed: <u>23505453</u>). Also functions as a membrane androgen receptor that mediates, through a G protein, the non- classical androgen signaling pathway, characterized by the activation of MAPK3/MAPK1 (Erk1/2) and transcription factors CREB1 or ATF1 (By similarity). This pathway contributes to CLDN1 and CLDN5 expression and tight junction formation between adjacent Sertoli cells (By similarity). Mediates androgen-induced vascular endothelial cell proliferation through activation of an inhibitory G protein leading to the AKT1 and MAPK3/MAPK1 (Erk1/2) activation which in turn modulate inhibition (phosphorylation) of GSK3B and CCND1 transcription (PubMed: <u>34555425</u>). Moreover, has dual

	functions as a membrane-bound androgen receptor and as an androgen-dependent zinc transporter both of which are mediated through an inhibitory G protein (Gi) that mediates both MAP kinase and zinc signaling leading to the androgen-dependent apoptotic process (PubMed: <u>25014355</u> , PubMed: <u>28219737</u>).
Cellular Location	Golgi apparatus, trans-Golgi network membrane. Cell membrane; Multi-pass membrane protein. Cytoplasm, perinuclear region Mitochondrion. Nucleus
Tissue Location	Highly expressed in pancreas, testis, and pituitary and moderately in the kidney, liver, uterus, heart, prostate, and brain, whereas expression is lower in the ovary and colon

Background

May act as a zinc-influx transporter (By similarity).

References

Clark H.F.,et al.Genome Res. 13:2265-2270(2003). Ota T.,et al.Nat. Genet. 36:40-45(2004). Lin L.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases. Suzuki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of lysates from NCI-H460,PC-3 cell line (from left to right), using SLC39A9 Antibody, was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.

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